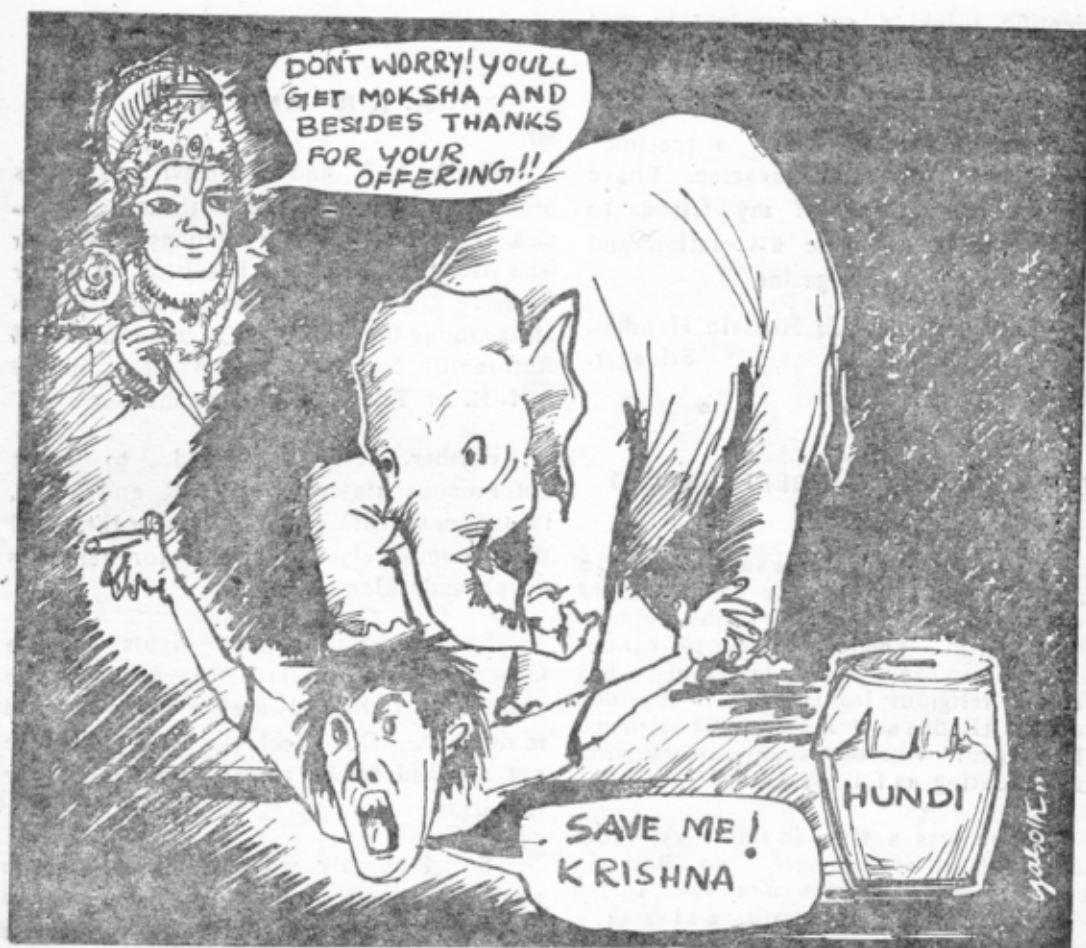


# FreeThought

The Largest Circulated Rationalist Monthly

June, 1979.

80 Paise



Four persons stampeded by Krishna temple elephant at Guruvayoor  
—A Report

Vol. IX No 6

Annual Subscription Rs. 9/-

REASON THINKS; RELIGION DREAMS.

# Letters : . .

## FREETHOUGHT

Sir,

Recently I came to know that some scientific minded and intellectually emancipated individuals have organized themselves in the name of Indian Rationalist Association to combat the irrational and unscientific thinking so prevalent in our society.

May I become a member of the association. Please send me a specimen copy of your Rationalist magazine. I have already persuaded many of my friends to become members of the association and subscribers to your magazine.

—Mohamad Ashfaq Hussain Handoo,  
Srinagar.

\* \* \*

## VIVEKANANDA ON BEEF EATING

Sir,

Ban on cow-slaughter is such a sensitive issue that even, progressive people avoid to oppose it, keeping in view the popular sentimentalism. The religious people cannot think of opposing it even in dream. But here is a religious leader who is regarded by all the Hindus as a redoubtable apologist of Hinduism, who said about cow slaughter and beef-eating as follows :

"There was a time in this very India when, without eating beef, no Brahmin could remain a Brahmin. You read in the Vedas how, when a Sannyasin, a king or a great man came into a house, the best bullock was killed". (The Complete Works of Swami Vivekanand—P. 174).

"You will be astonished if I tell you that according to the old ceremonials, he is not a good Hindu who does not eat beef. (Ibid—P. 136).

A pupil of swami Vivekanand writing the biography of his master writes: "The Swami courageously told them about the eating of beef by the Brahmins in Vedic Times. One day, asked about what he considered the most glorious period of Indian History, the Swami mentioned the Vedic period, when five Brahmins used to Polish off one Cow" (Vivekanand—A Biography by Swami Nihilananda—P. 96).

—Prof. Surendra Ajnat  
Banga.

\* \* \*

## A. I. R. AND T. V.

Sir,

The A. I. R. and the Television stations broadcast daily only the religious programmes. They wound our feelings whenever we switch on the radio or television set in our homes. They mostly propagate superstitious ideas among the masses. On the other hand Rationalist concepts find no place in the A. I. R. or Television programmes.

Further, it is proposed to grant autonomous status to A. I. R. and T. V. in the near future. I am afraid, they will then completely be utilised for religious propaganda alone.

So we must fight for our rights with the Government of India. We are also the citizens of India and are ten crores and odd in number. Our ideologies and views are not allowed to be spread through radio or television.

So, I humbly request you to organize a non-violent stir in front of all A. I. R. and T. V. stations at an early date to achieve our objects.

Vi Po. Pazhanivelanar,  
Thiruthuraiipoondi.

[A resolution in this regard was passed at the recent meeting of the National Executive Council of I.R.A.—Ed.]

"In face of the advance of scientific understanding, the controlling functions of God the Ruler, as they were confidently assumed by a simpler theology, have gradually dwindled away"

—JULIAN HUXLEY.

# Free thought

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## NEED FOR A SCIENTIFIC OUTLOOK

Science has long been an inseparable ally of rationalism. Both have human progress and happiness as their common aim. Inculcation of a scientific outlook in the minds of the people has had a desirable aim in putting obsolete beliefs and faiths and irrational practices to the sword.

Scientific reasoning has led to the spread of rationalistic thinking over the years. Progress in the realms of astronomy, evolutionary biology and anthropology and and molecular physics have all led to a wide awareness of the susceptibility of biblical and mythological concepts spread avidly by religion and vested interests.

A man who knows that a molecule of water contains 2 atoms of hydrogen and one atom of oxygen and of the impurities it may contain is less likely to accept that ganges water in which millions bathe can be a potent medicine for illness if taken a spoonful. A man who learns of the virus causing a disease is less likely to attempt to get his jaundice cured by mantras and perpetuate religious quackery.

Spread of scientific temper and science education in a country like ours will alone make the efforts of rationalists bear fruit earlier. △



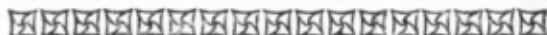
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Editor.

C. A. SESHADRI



## Readers' Forum

### BEYOND SCIENCE.

I have read the letter (Does God Exist ? April edition) of Reader N. R. B. Nair, Bombay, containing full of emotionally charged and name-calling words to me. I am indeed sorry, for my letter had been a cause to disturb his mental balance. I beg to repeat, however, that my argument is that the belief in God is not unscientific or irrational. Needless to say that Mr. Nair has miserably failed to grasp this basic truth and in which case the other things stated by him are redundant. With due respect to your learned reader, Mr. S. Lakshminarasimhan, I take liberty in clarifying my views further in the following words of his letter as appeared in the aforesaid edition of FREE THOUGHT.

"The picture of the universe given by Science, the factual universe that we perceive, physical and mental together, cannot be all there is. It is not a closed system..... It does not explain itself. Evidently there must be something else. Science, which rightly will not accept without proof, will also not deny without disproof..... There can be no disproof and no denial of the existence of elements beyond the scientific horizons."

— V. Sequelra,  
Baroda.

### I.R.A. CELEBRATES PERIYAR'S BIRTH CENTENARY.

On 28—4—79 the Periyar's Birth Centenary was celebrated by I.R.A. in a fitting manner. The function was presided over by Mr. Y. A. Lokhandwala, President of the Association.

In his presidential speech, Mr. Lokhandwala paid glorious tributes to the yeoman services rendered by Thanthai Periyar E.V.R. for the cause of rationalism and declared that all the States in India have much to learn from the movement started by him in Tamilnadu.

Dr. H. Narasimhaiah, former Vice Chancellor of Bangalore University who was the chief guest at the function, while paying tributes to the work already accomplished by Periyar during his life time stressed that much is still remaining undone and every rationalist should consider it to be his responsibility to complete the process of rationalism started by Periyar.

The meeting was also addressed by many other veteran Rationalists including Mr. M. V. Ramamurty, Vice President of I.R.A. from Hyderabad, Dr. J.C.B. Abraham of Madurai, Mr. G. Kuchelar, Former Mayor of Madras, and Mr. Panchatcharam, General Secretary of Tamilnadu Rationalist and Socialist Association.

The meeting was followed by a hypnorama performance by Prof. Hypno of Bangalore.





# NEWS AND NOTES

## PRIEST HELD FOR 'RIOTING'

A Roman Catholic priest and five other's have been arrested on a charge of rioting.

According to reports received here, there has been longstanding misunderstanding between Christian converts from the Kongu-Chettiar community and other converts, in the parish of St. Ignatius Church, belonging to Roman Catholics.

Two years ago, a man from the Kongu-Chettiar community who was enjoying the "Maniagar" rights in the church was denied the right. Ever since, Kongu-Chettiar converts have nursed a grievance against the church management because of the quarrels, there has been no mass in the church for the last two years.

It was also said that the new priest Rev. Joe Adaikkalam, was not favourably disposed towards the Kongu-Chettiar community.

Recently, he and some other priests closed the entrance on the southern side of the church compound which used to be frequented by people of the Kongu-Chettiar community. This was objected to by the community.

It was alleged that on March 24, Rev. Adaikkalam along with 100 men, attacked the Kongu-Chettiar converts, injuring six persons including two women.

On a complaint, the priest and five others were arrested and later released on bail.

The priest also has given a complaint, which is being looked into.

'INDIAN EXPRESS' 5-5-1979.

## INDIAN SWAMI ON TRIAL IN SWISS COURT:

LAUSANNE, Switzerland, April 24: An Indian monk and five other members of a sect that preaches love and brotherhood went on trial yesterday before the Swiss Supreme Court on charges of planning bombings and poison attacks in an alleged plan to exterminate Swiss opponents.

Black magic and guns, poisoned candies and acid-treated door handles figure in a bizarre string of crimes alleged to have been masterminded by 49, year-old Swami Omkarananda.

The soft-spoken Indian is the head of the Swiss-based Divine Light Centre that has followers in several European countries, Australia and Africa.

The Swami came to Switzerland in 1966 on the invitation of a wealthy Swiss woman he met in India. Helped by generous contributions, including donations from the head of one of Switzerland's biggest industrial companies, the centre spread rapidly in a residential section of the Winterthur, an industrial town near Zurich.

Complaints from neighbours about the sect's real-estate expansionism brought a flurry of counter-suits prepared by a special legal division at the sect headquarters.

The 41-page charge-sheet said the swami and the "hard core" of his followers gradually escalated his fight against the critics, first trying to put the hex on them by "tantrics and witches" flown into Switzerland from India and from European countries.

When that did not work, stocks of cyanide, arsenic and other substances were allegedly purchased in Switzerland and west Germany. (A.P.)—The Times of India.

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## NATIONAL EXECUTIVE COUNCIL MEETING OF I.R.A.

The first meeting of the National Executive Council of I.R.A. after its constitution in September 1978 was convened at Madras on 24-4-'9. The meeting was presided over by Mr. Y. A. Lokhandwala, President of the Association. After prolonged deliberations, the following resolutions were unanimously passed.

### 1. Cow Slaughter—

The National Executive Council of I.R.A. views with grave concern the undertaking of fasts by reputed persons and leaders to force the Government to bow down to their antiquated and outmoded notions and views regarding the issue of cow slaughter.

It calls upon the Rationalist forces throughout the country to muster their strength to fight back such kinds of attacks by obscurantist and reactionary groups.

### 2. Godmen :—

The N.E.C. of I.R.A. demands the constitution by the Central Government of a Commission of Enquiry:

- (a) To investigate and verify the truthfulness of the claims of Godmen, Priests, certain holymen and their followers to perform miracles.
- (b) To probe into the flow of moneys into the coffers of trusts or associations or organisations managed by them or under their auspices or in their name.
- (c) To recommend ways and means of preventing such Godmen parading in the public life of the country with false claims, if the commission finds them false and fraudulent.

### 3. Temples, etc. :—

The N.E.C. of I.R.A. condemns the unauthorised encroachment of public sites, highways and road margins, premises and compounds of Government and semi-Government offices and the consequent construction of temples, installation of images of deities, building of stupas and the like and calls upon the Governments to take steps to remove them.

### 4. All India Radio and Doordharshan :—

The N.E.C. of I.R.A. requests the information and Broadcasting Ministry and the Director General of All India Radio and Doordharshan to desist from permitting the use of the media for propagation of religions and Godmen. It also requests sufficient time to be allotted for propagation of scientific attitude and temper as enshrined in the Constitution.

### 5. Resolution on Organisation :—

The N.E.C. of I.R.A. resolves to request the Managing Committee to undertake the following organisational tasks :—

- (a) To bring into existence State Association formed at State Conferences, affiliated to the National organisation in atleast half the number of the Indian States by the end of December, 1979.
- (b) To convene the 11th All India Conference at Bombay before the end of February, 1980
- (c) To conduct Superstition Eradication Campaign in atleast five States by the date of the All India Conference.
- (d) To create the necessary climate for the campaign in the remaining states by the end of 1980.
- (e) To explore the possibility of conducting a Seminar at a State Capital by the end of 1980 on "STATUS AND ROLE OF WOMEN".

\*                      •                      •

### ROURKELA RATIONALIST ASSOCIATION.

The Annual General Body Meeting of the Rourkela Rationalist Association, was held on 29th April, 1979 at D/813, Sector-8, Rourkela and the following persons were elected to the new Executive Committee for 1979-80.

Mr. M. S. Gokulan	—	President
„ R. S. Paniker	—	Secretary
„ M. R. Raman	—	Treasurer
„ R. Vijayan	—	Librarian
„ T. P. N. Pillai	—	Member
„ K. P. V. Panikar	—	Member
„ M. C. S. Pillai	—	Member
„ N. R. Sekhar	—	Member
„ C. G. S. Pillai	—	Auditor

\* \* \*

### DISMISSAL OF Mr. V. T. RAJSHEKAR SHETTY CONDEMNED.

The General Body of the Karnataka Rationalist Association here expressed shock over the illegal and arbitrary 'dismissal' of Mr. V. T. Rajshekar Shetty, Senior Staff Correspondent of the Indian Express, Bangalore, a noted writer and General Secretary of the Karnataka Rationalist Association.

In a resolution, it also condemned the action of the Indian Express Management in dismissing him on the flimsy ground that he was writing articles to other than Indian Express inspite of his 'explanation' that he possessed the 'written permission' of his editor-in-chief.

The K. R. A. is of the opinion that the ground put forward in the dismissal letter is just an excuse to get rid of Mr. Shetty while the real motive behind the dismissal is communalism against which Mr. Shetty was a tireless fighter.

The K. R. A. called upon the Indian Express Management to immediately reinstate Mr. Shetty and urged upon fellow rationalists, leftists, trade unionists, intellectuals and progressive journalists all over India to fight for this cause.

— Prof. A.M. Dharmalingam,  
Bangalore.

\* \* \*

### ANDHRA PRADESH STATE RATIONALIST CONFERENCE.

The First Andhra Pradesh State Rationalist Conference was organised at Eluru on 6-5-79 under the auspices of the West Godavari branch of I.R.A.

The welcome address was presented by Mr. Goda Satyanarayanamurthy, Chairman of the Reception Committee of the Conference which was inaugurated by Dr. H. Narasimhaiah, former Vice Chancellor of Bangalore University. As Mr. Y. A. Lokhandwala, President of I.R.A. who was to preside over the Conference could not go over to Eluru, a local Rationalist and a noted Advocate Mr P.H.V. Somayajulu, presided over the inaugural session.

Mr. A. Suryanarayana, General Secretary of I.R.A. delivered the Key Note speech emphasising the imminent need for building up a strong rationalist movement.

The Conference was a grand success in that it attracted as many as 250 hard core rationalist delegates from different Districts of the State as also from the neighbouring States of Karnataka and Tamilnadu.

The subsequent business sessions were presided over by Mr. M. V. Ramamurthy, Vice President of I.R.A. In these sessions, almost all the delegates present were given an opportunity of briefly explaining the efforts put in by them for the promotion of rationalism.

At the concluding session, the Conference unanimously resolved to form into Andhra Pradesh Rationalist Association to be affiliated to Indian Rationalist Association. In the same session, a State Executive Committee has also been constituted with members representing different Districts. Before the conference came to a close, as many as 15 resolutions were passed. These included a condolence resolution at the sad demise of Dr. A.T. Kovoov, Mr. Abburi Ramakrishna Rao and Gudipati Venkatachalam; an expression of the concern of the delegates at black mail being resorted to by the obscurantist forces to force Kerala and West Bengal Governments to introduce a ban on cow slaughter, condemning the unauthorised construction of roadside temples; an appeal to the Central Government to constitute a National Committee to investigate the claims of the so called miracle men; denouncing the participation of ministers and other Government dignitaries in the religious functions; condemning the setting up of model schools contemplated by the Andhra Pradesh Government to promote religious interests; request the All India Radio and T.V. to put an end to the religious propaganda presently made by them and allot the time so saved for promoting a scientific outlook among the people; adoption of common civil code for people belonging to different religions; deletion of lessons which tend to propagate religion in the text books, decreasing the number of festival holidays being declared by the Government, etc.

In the evening, a public meeting was organised by A.P.R.A. Dr. H. Narasimhaiah appealed to the audience to be careful of the godmen and highlighted the atrocities being committed in the name of god, religion and scriptures. He further clarified that rationalism is not against any particular religion but it only advocates an unbiased

analysis of the religious preachings. The meeting was also addressed by M/s. A. Suryanarayana, M. V. Ramamurthy, Goda Satyanarayanamurthy, Venigalla Subba Rao, Ravipudi Venkatadri, K. Padma Rao etc., Mr. M.V. Ramana Reddy, President of the Eluru branch of I.R.A. presided over the meeting. The same night, the first meeting of the State Committee was convened under the presidentship of Mr. A. Suryanarayana, General Secretary of I.R.A. In this meeting the following Office Bearers and Managing Committee members were unanimously elected:

Hon. President	Dr. P. M. Bhargava, Hyderabad.
Executive President.	Mr. Ravipudi Venkatadri, Chirala.
Vice-Presidents	Ms. M. V. Subbamma, Hyderabad. Mr. K. Padma Rao, Ponnur.
General Secretary	Mr. P. Bhaskar Rao, Eluru.
Joint Secretaries	Mr. S. Venkateswara Rao, Eluru. Mr. N. Rama Rao, Ramachandrapuram.
Managing Committee Members.	Mr. N. Chalamayya, Kowdipalli. Mr. Gusasi, Eluru. Mr. Venigalla Subba Rao, Repalle. Mr. G. Babu Rao, Gudivada. Ms. S. Vijayaratna- kumari, Nidadavole.

The State Committee also decided to conduct a Superstition Eradication Campaign with Dr. H. Narasimhaiah, a Hypnotist a Magician etc. in different towns of Andhra Pradesh.

\* \* \*



## "ASTROLOGY FOR ENGINEERS!"

The Institution of Engineers is a reputed body of Engineers from all over India. It conducts courses and lectures by eminent men of science and technology.

However the Madras Chapter of the Institution of Engineers went one step ahead and called a pseudo-scientist—an astrologer to deliver a speech. The 'scientist' was one self-styled Dr. (Mrs.) K. N. Saraswathy, a woman who earns a lot of money selling her 'expertise' on astrology. But this woman had evidently thought that she could spend the time in more pecuniary pursuits than lecture to a small gathering of scientists and engineers, or may be she was just afraid of being exposed. Anyway she didn't turn up to lecture! The News Bulletin of the institute said "In the absence of Dr. (Mrs.) K. N. Saraswathy who could not be present due to some unavoidable circumstances, Mr. K. G. Panicker addressed the gathering on the subject 'Astrology for Engineers' on 24th January, 1979."

In his speech the learned Panicker (the surname of Panicker typifies a sub-caste of soothsayers among Nairs) said "There is a prejudice which characterises the majority of the intelligent group sneer at the science as superstition and excuse themselves from any investigation, just because the modern scientists reject it." (Admission indeed!).

"He added that the entire fabric of Astrology is broadly based on the principle of evolution of time. Astrology is the science which records the influence of planets on the terrestrial phenomena. They can be classified under (a) Physical conditions, (b) Mental peculiarities, and (c) Spiritual aspirations.

"Generally the engineering profession is derived from a consideration of the 10th House, and its Lord and planet in the 10th House, the dominant planet in the horoscope, and the situation of 10th Lord in the Navamsa. The major planets which indicate the engineering profession are Mars and Saturn. The conjunction or combination of these planets in fiery signs will indicate that the man will be an engineer."

Thus spake Mr. Panicker.

What a shame that an august body of Engineers should encourage a pseudo-science like astrology!

\* \* \*

## STUDY COURSE ON RATIONALISM.

The second Study Course on rationalism was conducted by I.R.A. at Madras from 29-4-79 to 1-5-79. An interesting feature of this course was that contrary to expectations, the course attracted more senior rationalists than beginners as a result of which the course proved to be not only a training camp but also a study camp.

The course was divided into 12 important sessions which were handled by eminent persons in their respective fields. While Dr. H. Narasimhaiah delivered a special lecture on Scientific Outlook, the other faculty included Mr. S. L. Bharati (on History of Rationalist Movement); Mr. Y. A. Lokhandwala (on Islam); Mr. P. K. Narayanan (on Psychology and Hypnotism); Dr. J.C.B. Abraham (on Evolution of Man); Mr. A. Suryanarayana (on Need for a Rationalist Society); Mr. M.V. Ramamurty (on Hinduism and also on Humanism vs. Rationalism); Mr. Dinesh Nettar (on Astronomy & Astrology as also Quantum Mechanics); Dr. T. J. Yavelu (on Medicine and Superstition) and Dr. S. Gnanamuthu (on Christianity).

All the participants thoroughly enjoyed the course.

At the end of the course, it was decided to conduct more such courses at other centres like Hyderabad, Bangalore, etc.

\* \* \*

# Ancient Vymanika Shastra or Epic Aircraft

—H. S. Mukunda

A critical study of the original work 'Vymanika Shastra' published by G. R. Josyer and 'Brihad Vimana Shastra' published by Dayanand Bhavan, New Delhi, has been made by Mukunda and others and published in Scientific Opinion, 1974, May and June. A brief summary of the study is presented here.

The two books which initially were thought to be different, but which later turned out to be same claim that the science of flying and methods of construction of air planes were propounded by Bharadwaja and these documents are of vedic origin. INVESTIGATIONS REVEALED THAT THE ABOVE TEXTS WERE DICTATED BY ONE PANDIT SUBBARAYA SASTRI TO SRI VENKATACHALA SHARMA AT BANGALORE DURING 1904—1908. The drawings found in G. R. Josyer's publication were made by a draughtsman of a local Engineering College during this period. As such it was established that the work was written only in recent times. To further establish that it is not of vedic origin, the slokas were examined for use of vedic words and metre. It turned out that less than one per cent of the text verses were based on vedic metre.

Though the text 'Vymanika Shastra' states about Tantrik, Mantric and Kritak Vimanas, the detailed description is restricted to kritak vimanas, a class of vimanas, capable of being made of physical materials and used for flying from island to island by men for the purposes of both pleasure and warfare. The types of planes discussed are Shakuna, Sundara, Rukma and Tripura. Nowhere in the text is any discussion on principles of flying and force causing forward motion. Most descriptions contain certain dimensions (sometimes contradicting those of the drawings), as though their author intended the readers to make only one sized air planes. The speeds of the planes are phenomenal. For instance, the speed of Sundara vimana is supposed to be over four hundred yojanas in one ghatika. Interpretation of these lead to a speed of 10,000 km. per hour—an unheard figure for the speed of air-planes near earth. Similarly Rukma vimana is expected to travel 105 krishas per ghatika implying 1,000 km/hr. again a very high speed, though not fantastic. Tripura vimana is expected to travel on road, on water as well as in air.

The methods of propulsion described in most cases make the air plane resist flying rather than aid it. One sloka on the description of Sundara vimana leads to no interpretation other than saying that force is developed in the same direction in which jet is exhausted thus implying violation of Newton's II Law of Motion.

Most descriptions appear to be more in the nature of imagination than of genuine physical realisation and IT IS CONCLUDED THAT AIRCRAFT (KRITAK) BASED ON PRINCIPLES DESCRIBED IN THIS WORK COULD NOT HAVE EXISTED AT ANY POINT OF TIME IN KNOWN HISTORY RIGHT FROM VEDIC PERIOD. ▲

(Courtesy—VIJNANA PARICHAYA)

# The Vacuum Argument

## Myth, Mystery or Fact?

—D. K. Narayanan

(Contd. from May Issue)

### WHERE VACUUM ?

Now take the case of a rationalist who once upon a time in his youth as a boy was a dualist, a theist who believed in sinful body and immortal soul, life after death, hell, heaven and who practised rituals, worshipped gods, dreaded evil spirits and ghosts. These were the things of the long past. He is not ashamed of the past, nor he curses himself or anybody for the shoddy practices of the past. He realises that in his younger days he was following only what he was told to do by his parents, by the people around. He is now proud for he is changed, he is happy for he could find the truth, he is peaceful for he is a rationalist.

Looking into the processes of the brain development of the rationalist friend, would it be in order if one imagines that there are two sets of nerve connections present in his cerebral hemispheres? One set representing his old beliefs and behaviours and the other responsible for his present mental stature,

the mental make-up of the Rationalist? Or would it be correct, again, if one thinks that the previous nerve connections had disappeared leaving their place in the cerebral hemispheres blank and void? If that is so, there certainly is a case for filling in the vacancy. Then the big question of the idealist believer will apparently remain. "What you Atheists and Rationalists have with you to fill in the vacuum created as a result of my throwing away the old beliefs?"

But regrettably, these are imaginary propositions arising out of superficial ideas. When previously formed temporary nerve connections are replaced by new ones, it does not leave aside any void or vacuum of any sort. It should not be forgotten that conditioning is the result of reactions of nerve cells to the external stimuli. When new line of thinking and understanding develops, it does not cause any expansion of the existing brain matter and the area of the cortex remains the same.

The example of the idealist dualist theist growing out into a Rationalist can now be examined in greater detail. The process of transformation is essentially deconditioning and further the objective scientific outlook of the rationalist. The underlying working condition of the nerve cells in the cerebral cortex involving the process of deconditioning is inhibition.

Nature of inhibition has already been explained in the previous passages. There are two basic types of inhibitions as differentiated by Dr I P. Pavlov. They are, (1) internal conditioned inhibition and (2) external unconditioned inhibition.

A conditioned reflex (in the instant case, nerve connections representing superstitious beliefs and pursuits) becomes extinct as a result of either of the two inhibitions. This is well illustrated in the following experiments.

Take for example, the dog in which a conditioned food reflex to the ringing of a bell has been formed. When the bell rings, the dog starts salivating even though no food has been given to it. Supposing that the experiment with this dog is continued for a long period, each time the bell rings but no food is introduced to supplement the conditioned reflex. As a result, the quantity of saliva secreted each time gets less and less and ultimately a stage is reached when there is no trace of saliva secreted in response to the bell. The conditioned food reflex has become extinguished because during the many subsequent experiments, the conditioned reflex is not supported by unconditioned reflex. The phenomenon is the result of 'internal conditioned inhibition'. The most characteristic feature of this type of inhibition is that it originates in the brain itself and no outside or external agent is involved in the development of this type of inhibition. The conditioned food reflex disappears of its own in the absence of supplementation.

But external unconditioned inhibition originates either in the external surroundings or in another excited area of the brain. In the experiment with the dog, as for example, the bell rings, and it begins to secrete saliva. While the experiment is on, supposing that a sudden, strong and strange signal is introduced, say for example, a piercing whistle. What happens then? The flow of saliva stops abruptly, the dog turns to the direction of the whistle, jumps and barks. Here the sudden stoppage of the conditioned food reflex is the result of "external unconditioned inhibition," its source being an external agent, namely the strange piercing whistle.

Primarily, 'internal conditioned inhibition' is responsible for the transformation of the believer of the superstitious, theistic, religious order into an atheist in passage of time. During the course of the transfor-

mation, the nature of the environment is different, and the stimuli reaching the cerebral hemispheres do not supplement or support the conditioned reflexes which were formed in the cerebral cortex in his younger days as a result of the influence of his childhood surroundings. By and by, the individual gets rid of his shameful cerebral attitudes. And because of the continuous influence of the changed surroundings and the stimuli reaching from the new environments, new sets of conditioned nerve connections are established in his cerebral cortex. With the result, the individual becomes an atheist, having been freed from the shabby beliefs and practices of the past.

But majority of our people are condemned to lead a superstitious idealistic dualistic, religious life as handed down to them by their parents, elders and society. The religious beliefs, practices, rituals, festivals and social functions continue supporting the conditioned reflexes in them as a result, no chance of 'internal conditioned inhibition' ever developing in their cerebral cortex to destroy the superstitious beliefs, behaviours and attitudes, the cumulative result of which is that they continue to be superstitious as ever as they used to be. Therefore it is upto the individuals to account for what they ought to be. By changing the environments they can change their cerebral attitudes. "Changing the environments" does not purport to mean to change the social circle in which an individual is put up. It simply means that individuals should create situations where they can meet people with progressive ideas and scientific outlooks, read books and other printed materials which impart objective realistic and scientific informations. At the same time, they should avoid superstitious social functions and practices with a will of strong motivation in order to enhance the chances of establishing



strong internal conditioned inhibitions and for the formation of new conditioned reflexes responsible for complete transformation. However, on the analogy of 'external unconditioned inhibition' explained in the experiment with the dog, there is sufficient logic to conclude that a thorough change in the pattern of beliefs, practices and pursuits of the public in general can be brought about by the introduction of a sudden, strange, and forceful, social order. This logic has been proved practically sound in modern times, in countries where such social order was established.

This paper is being completed. In the meanwhile, does not the foregoing analysis present conclusive proof that changes in the 'mental make-up' do not leave aside or cause to develop any vacuum to be filled in? Believers, obscurantists, theists, need not therefore fear that if they wed rationalism they would be in a predicament for want of a set of 'moral codes' to fill the 'celestial vacuum'. For, the vacuum argument is a myth having no objective reality. Change is proof enough for non-existence of vacuum.

**IN CONCLUSION :** In the course of the present study, I have avoided any mention about Freud and his works and the array of Freudian thinkers. The omission is deliberate, for I wanted to avoid discussion on a topic about which readers are more or less familiar. Secondly, it appears to me, that his imaginary assumptions and hypotheses (pan sexualism) do not merit any serious study.

The present paper deals with the central nervous system and its working as revealed by Ivan Petrovich Pavlov. Much research is now being done by Scientists into other factors which have also definite say in 'mental attitudes' of man. Work so far done in the field of biochemistry and genetic codes, indicates that these factors too contribute to

determine the mental development and cerebral functions. Dr. Pavlov, while discussing the importance of the reflexes and conditioning, repeatedly referred to 'congenital factors'. There is no room to doubt that congenital factors are not what the Scientists are now trying to differentiate in the form of biochemistry in order to have precise understanding of the subject. The readers, might therefore remember the all-round relevance of Pavlovian works especially in the field of physiological psychology.

**CONCLUDED.**

[The Article - 'THE VACUUM ARGUMENT - MYTH, MYSTERY OR FACT?' is concluded with this issue Readers' comments on the article are invited-Ed.)

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## E. S. P. EXPOSED

(From an address given by Dr. Jim Woolnough)

Extrasensory perception is the acquisition of knowledge without the use of the known senses. It is expounded as (i) Clairvoyance, the test of extrasensory perception of an object, and (ii) Telepathy, the test of extrasensory perception of a thought.

This is perhaps the most universally accepted myth, and the hardest to debunk. As a medical student, decades ago, I realised that ESP could not work, but was amazed to learn that its existence had been 'proved' scientifically, by card tests.

It proved impossible, of course, for me to debunk the tests merely by reading what I could about them. However, I noted that better-than-chance results occurred only occasionally and were usually inhibited by the presence of a sceptic during the tests. This was explained on psychological grounds. To me it suggested something different.

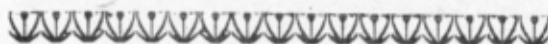
Coming back to the beginning, however, one notes that almost everybody, including some of my humanist and rationalist friends, has some story to tell about some extraordinary and inexplicable event.

The most recent one to be thrown at me, came from an elderly woman agnostic. She told the familiar story of the parlour game in which one person is sent out of the room and others secretly think up some simple action expected of the lone one on return. They concentrate on sending the message.

Asked to Explain: In comes the outsider, and faithfully carries out the expected action. 'In every case' I was told, 'the person came back and did as expected'. Usually I'm asked how to explain the occasion as anything but proof of telepathy.

Of course, I can't explain it. I wasn't there

This story was told perhaps 40 years after the event. Recollection of failures would fade before memories of success. Were some



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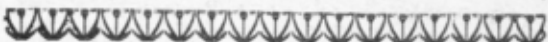
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of the successes achieved after several failures? How limited was the choice of possible actions? How reliable is the retelling?

Because of all these uncertainties, it was only natural and right that scientific tests of ESP should be undertaken. In the shape of card guessing and similar experiments, this work has gone on for 70 years, to my knowledge.

A pack of cards would be shuffled and placed on a table, face down, so that nobody knows the order of the cards. An experimenter takes down the guesses that a subject makes as to the designation of the top card, the second card, and so on, down through the pack. This list is then compared with the actual state of the cards, as subsequently listed. The number of correct guesses to be expected from chance alone, is known from statistical evaluation of the situation. The hope was that some subjects would do much better than chance alone would allow.

Experiments with an ordinary pack of cards were a complete failure and this was never explained. Another pack was invented, consisting of only 25 cards, five each of five simple symbols like square, circle etc. The chance score was five, through the pack of 25 cards.

Most subjects were unimpressive, but a few had successes, sometimes startling, but only at times.

As the years passed by, the successes, though erratic, mounted and became so impressive, that clairvoyance was taken by some as proved, although not reliably reproducible.

Variations in tests similarly 'proved' the existence of mental telepathy.

Good results came through at great distance and even in guessing how tomorrows cards would fall!

As sceptics came on the scene, and suggested more and more rigid precautions in the tests, the successes diminished.

The gullibility of Professor J. B. Rhine, the doyen of ESP research, was shown up when he watched the antics of a mind-reading, question-answering side-show horse called Lady Wonder, and decided that the only possible explanation was that it really had the powers claimed. A magician later showed how the simple trick was performed, but Rhine remained silent.

The 1973 edition of Encyclopaedia Britannica lists criticisms of the ESP research under the headings: Sensory clues, Habits of thinking, Recording practices, Statistical methods, Experimental design, Fraud or non-exclusion thereof, Lack of replication of results, and rarity of good results. It goes on to the comment 'With the separation of Rhine's para-psychology lab from Duke University, no new high-scoring subjects had been reported in the U.S. since the early dramatic successes'.

#### GULLIBLE PROFESSOR:

The final blow (I presume and hope came when one of Rhine's workers was caught 'faking results'. Prof. Rhine's comment was 'What most concerns us all is the question. What will the affair do to our struggling, insecure branch of science?'

I have heard Rhine described as a 'Charlatan of the first order', but I believe that is too strong an expression. I believe he was just gullible. △

COURTESY: THE NEW ZEALAND RATIONALIST AND HUMANIST.

## SCIENCE vs. BIBLE

—James Hervey Johnson

The conflict of the Bible and science is so great that any educated man immediately discounts the Bible as the divine revelation of a supreme being.

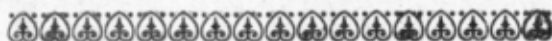
There are two conflicting accounts of the formation of the earth, both given in Genesis. The Bible says that the earth was without form of void, and darkness was upon the face of the deep. Science says that the earth was formed from the Sun, and if such is the fact there must have been plenty of light. Later, God commanded the beasts of the field and creeping things to be formed, but science shows that creeping things and beasts of the field did not originate at the same time; that millions of years transpired between the development of the lowest reptiles and the beasts of the field. Furthermore, according to science the development of the earth and all of these animals took many millions of years, all of which can be shown to any reasonable mind by the measurement of the layers of earth, or sediment laid down upon the original rocks by the action of lakes, rivers, and seas.

There are many, primitive fables as to the creating of man, but of course the science of anthropology presents the only real evidence and it shows that through eons of time, man evolved from lower creatures.

Astronomers can predict the day of eclipses of the Sun and moon hundreds of years in advance. They know exactly what time these events will occur. They are able to tell when the tides will ebb and flow and what the height of the tides will be. Their "prophecies," to use the Bible word for predictions, are exact and accurate and civilization depends upon them. Because of their exact measurements they have been able to predict that when telescopes were increased in power, other planets of this solar system would be discovered and their predictions were fulfilled by the discovery of the planet Uranus.

Contrast these exact predictions with the prophecies of the Bible, which are couched in incomprehensible terms allowing conflicting interpretations. Contrast the knowledge of scientists with the child-like Biblical story of the creation of the world. There is no ground in science for the story of the formation of a woman from a man's rib. △

—from "Superior Men"



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## J. B. S. Haldane - Rationalist Par Excellence

*—Dr. J. C. B. Abraham*

J. B. S. Haldane (1892—1964) was one of the most brilliant biologists of the twentieth century. His relevance to us, however, is that he was an uncompromising rationalist.

His father was an orthodox Christian but his mother was a freethinker who considered religion only suitable for servants. Haldane developed a mild liking for Anglican ritual but was completely immune to religion. Quite early in life he was engaged in spreading the gospel of rationalism. This he did by circulating among his peers books like Haeckel's *RIDDLE OF THE UNIVERSE*, where it was reasoned that God is nothing but a gaseous vertebrate!

During the first world war, while fighting in the trenches, he was amused that both friend and foe alike invoked God's help. The irony of the situation inspired him to compose a poem which ran.

"Thy name is on our foe's lip and on ours  
Strong in thy name we break and burn  
and slay..... We curse Thee God....."

Revealed religion, as represented by the army chaplains, was an object of scorn to Haldane. It was inevitable that he should become an atheist. At this time he wrote, "When I set up an experiment I assume that no god or angel or devil is going to interfere with its course: and this assumption has been justified by such success as I have achieved in my professional career. I should therefore be intellectually dishonest if I were not also atheistic in theory". He became a member of the Rationalist Press Association in 1924 and from 1927 onwards became a regular contributor to the *RATIONALIST ANNUAL*. True to his convictions as a rationalist, he felt that a lot of metaphysical cobweb can be blown off if the origin of life could be explained in materialistic terms of cause and effect, and the supernatural element rendered unnecessary and irrelevant. To this end he contributed a lengthy article, *THE ORIGIN OF LIFE*, to the *RATIONALIST ANNUAL* of 1929. Today, half a century later, Haldane's theory is the most widely accepted one and also has proved the most fruitful in that it has promoted experimental verification of the origin of organic life from simple inorganic substances, thus eliminating the metaphysical gap between the living and the non-living.

One of the important tasks of rationalism is the toning down of fanaticism. In this respect, Haldane was a shining

example of practising what one preached. When brilliant young scientists were victims of racial fanaticism in Hitler's Germany they were helped to find a living in England. Among those who gained academic posts with Haldane's help, and later rose to scientific fame, may be mentioned Boris Chain, Hans Grueneberg, Ursula Philip and Hans Kalmus.

Like a true rationalist, Haldane had an open mind on matters scientific and parascientific. When science grew pompous and eugenics spoke of sterilisation of the unfit and so-called racial differences, it gave Haldane an opportunity to indulge his favourite pastime of puncturing illusions. He pointed out that sterilising of the unfit was not only unethical but also ineffective in practice. Regarding paranormal phenomena, like extra sensory perception, he had an open mind, stating that if and when ESP was shown to occur beyond any doubt, its physiological basis also must be explained before it could be accepted as a normal phenomenon.

Haldane was favourably inclined towards communism for political and philosophical reasons. "My philosophy is the philosophy of Marx and Engels, Lenin and Stalin" he proudly proclaimed. But no less important was the fact that the members of the Communist Party crusaded against the concept of God in a manner that Haldane found very close to his heart. He was fond of quoting Lenin's view that religions are genuine but sterile flowers on the tree of human culture.

Whenever possible Haldane made use of a public platform to propagate his atheistic convictions. In London, at the

Queen Mary College Debating Society, he seconded with great gusto the motion "This house has no need for a God". It must be noted that this was at a time when such public avowal of atheism could be nothing short of disastrous for one's career and social standing. It is in this context that one must admire Haldane's moral courage.

Like Bertrand Russell and the Huxleys, Haldane had great faith in the power of the printed word. He believed that by rational argument and persuasion one can wean people out of the superstition in which they were wallowing. To achieve this end he threw himself heart and soul into popularising science which he considered the most vital and potent strategy. It is no coincidence that along with Bertrand Russell and Julian Huxley J. B. S. Haldane also was awarded the UNESCO Kalinga Prize for popularising science.

While addressing quite appropriately, the Heretics of Cambridge, he chose the title *DAEDALUS, OR SCIENCE AND THE FUTURE*. Haldane was convinced not only that salvation of mankind was to come through science and technology, but more important, man can attain to his full stature only when the human society was permeated by the scientific spirit and scientific attitude.

Whenever there was a controversy involving religion or science or politics one could count on Haldane's involvements; raising awkward questions, debunking orthodox opinions and ridiculing popular misconceptions. It all sprang from his general view that the whole point of education was to make people think. He never considered a child too young to be educated

Amidst his multifarious activities he found time to write an Arabian Nights-like story MY FRIEND, Mr. LEAKEY, where he brilliantly illustrated how science could be made intelligible and entertaining to children.

An usual calumny of religionists against noted atheists is that on their death beds the atheists trembled and recanted. Haldane was a living refutation of this mischievous lie. On receiving the medical confirmation of his cancer, Haldane said "The letter contained bad news about the persistence of cancer. After I read the death sentence I don't think my pulse rate changed by five per minute". With typical sangfroid he went on to compose a poem "Cancer's a funny thing" in which he said.

I know that cancer often kills  
But so do cars and sleeping pills  
.....  
My final word before I'm done  
Is "Cancer can be rather fun"

Predictably, he wrote to the hospital authorities making suggestions for improvement of treatment of cancer. Commending the psychological efficiency of a nurse, he said "The nurse gave me just what I needed—the maximum of encouragement and the minimum of sympathy".

In death, as in life, Haldane was a true rationalist. He bequeathed his body to the Rangaraya Medical College, Kakinada. After his death, he had no use for it and desired that it shall be used by others. Haldane was a many-splendoured genius but his brightest facet was his uncompromising rationalism.

## Invocation to Fire-God

— V. GOPALAKRISHNAN.

Bless us, O Fire-god, bless us this day.  
Save us from sins we commit ev'ry day  
Take our offerings as scriptures decreed  
Kick up your flames and have a good feed.

Burn up the cloth an' blacken the grains  
Take what you like but give us the rains !  
Devour up the logs an' all that we feed  
Give us the wealth that's all that we need

Feast on the edibles given by the rich  
A sop to stay pliant without any hitch  
Then bless us, O Lord, bless us each day  
That richer we may get an' richer we may [stay

'Thus when you've had a sumptuous meal  
You're sure to get a thirsty feel  
Grains wouldn't quench nor cotton nor silk  
It's got to be ghee from holy cow's milk

Amid mantras we pour the best, aslighee !  
To kindle thy flame and pray before thee  
" Bless us, O Fire-God, bless us this day  
Give us the riches an' make us all gay "

This 'havan' of waste has drawn up a crowd  
The priests are agog with chantings aloud  
Propitiating 'Him' in the bonfire they've lit  
Consigning the foods to Agni-devta's writ !

Somewhere, not far away, a babe-in-arm [cries  
On a poor mother's bosom unfed he lies  
Many more alike him would silently call  
Bless us, O fellow-men, think of us all !

△

△

## The Biological Basis of Democracy

*—Dr. J. C. B. Abraham*

In his famous Gettysburg address Lincoln used the phrase "all men are created equal". What Lincoln meant was that before law and justice, and in human worth, all are equal. This is a noble, ethical principle and is generally considered the basis for democracy. But as a bare statement of fact, Lincoln's phrase is palpably false. Lincoln himself must have noticed that his gaunt figure towered over many others. Perhaps no two individuals in the crowd listening to him were of the same height. Some were tall and some were short. Some were fair and some were dark. Some were lean and others fat. Some were very intelligent and some others were dull. For every one of these traits, there was a genetic basis. The fundamental truth in biology is that no two individuals are ever alike. Variations are universal. Then, does it mean that there is no biological sanction for democracy?

I shall argue, in this article, that there is such a sanction in biology for democracy and human freedom.

We, as rationalists, are concerned with democracy. When individual freedom is curtailed we protest. When an eminent Vice-Chancellor is bounded out of his job by vested interests we protest. When Harijans are persecuted we protest. This is as it should be. I would also like to draw the reader's attention, at this juncture, to the popular fallacy that democracy is majority rule. The process of electing our rulers is, surely, by majority vote. It does not follow, however, that ruling is by the majority or for the majority. Democracy is NOT majority rule. The essence of democracy is the protection of minority rights. This is a matter of great importance to rationalists, as we are a minority—a microscopic minority. The founding fathers of our nation, alive to this issue, declared India a secular democracy. India is predominantly Hindu. Muslims, Christians and other non-Hindu religionists and rationalists like us, form a minority. But if we have been, so far, treated reasonably fairly, it is because of democracy being interpreted, not as majority rule, but as protection of minority rights. When rabid Hindus speak of "Indianising Muslims and Christians", as if Muslims and Christians are not full Indian citizens, they are ignored with the contempt they deserve.

And, now, back to my earlier question. Is there a biological basis for democracy? The answer is an unqualified "Yes". I shall use, as my basis for argument, the very interesting phenomenon of polymorphism (many-types). Natural populations of animals, including human populations, are characterised by distinct traits among its individuals. To give just a few human examples, with reference to eye colour, persons of a same population may be blue

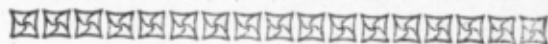


eyed or brown eyed or dark eyed. Again, with reference to hair, individuals may be curly, wavy or straight. We say man is polymorphic for these traits. Blood groups are another good example. In the same population we find some individuals being A group, others B group and yet others O or AB. The percentages of each group may vary, but even the least will not be a negligible quantity. And this situation is likely to persist for several generations. If these traits were adaptively neutral, this blood group polymorphism will not be maintained and will tend to become a single type or monomorphic. That the polymorphism is maintained for several generations is a clear indication that each type or, in this case, each blood group has some distinct value.

It is interesting to note that this blood group polymorphism is found also in the chimpanzees, our nearest relatives among the apes. This means that the common ancestor of the apes and man itself had this A-B-O polymorphism, millions of years ago. After these millions of years of separation the polymorphism is maintained in the descendent species. In other words, the polymorphism is older than the species. This maintenance of three or four distinct forms over vast stretches of time can be achieved only by Darwinian Natural Selection. We conclude, therefore, that variety and differences are actively encouraged and maintained in the population. In nature, the most stable communities are also those known for their diversity. Tropical communities are more productive and more stable, compared to Arctic and Antarctic communities, precisely because of their incomparably greater diversity. In Nature, it is a virtue to encourage and tolerate diversity.

Going back to the blood groups, in Tamil Nadu B Group is the commonest and O group is the rarest. This does not make

the B group superior. And herein lies the lesson of biology. The majority is not necessarily the superior, and the minority is not necessarily to be despised. We must learn to accept differences and tolerate heterodoxies. The Communists must learn to live with the Capitalists. The Indians must learn to live with the Pakistanis; the Hindus with the Muslims; and the Christians with the Atheists. Man is polymorphic, and therefore there is a biological basis for democracy and human freedom. Atleast on this point Science is not neutral and speaks in a language fully acceptable to Rationalists.  $\Delta$



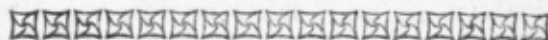
#### CAN ANYBODY AFFORD ?

Reliable sources say that the medical treatment given to Jaya Prakash Narayan, during his illness, at Jaslok Hospital, has cost Rs. 28,00,000/- apart from the professional charges of the top physicians, which though not charged, may have run into further couple of lakhs of rupees.

Moreover, the political luminaries who vied with each other to prove their loyalty to J. P. by air dashing to Bombay, would have cost some lakhs of rupees.

J. P. is one of the millions who gullibly believe that all that happens is predestined by their illusory god and suprisingly, J. P. has also faith in the fraudulent miraculous power of Satya Sai Baba for curing all ailments. Hence, J. P. and his proteges have acted against the divine authority of destiny in which they repose their faith irrationally and allowed the colossal expenditure for the cure of his ailment, which otherwise, their faith and belief would have miraculously cured!

—Y. A. Lokhandwala,  
Bombay.



## Genesis of God

—D.N.K. Kumar, Bangalore

The three Dominating human fears—Of death, infertility, and loneliness—would each in their own way have led to the idea of a Spirit world inhabited by superhuman creatures, who could be approached by prayer. Also the early man's rational bewilderments would have forced him to postulate a supernatural cause to explain the more mystifying effects in his environment. Making use of all these factors, Palaeolithic leaders would have grasped the opportunity to use the concept of a superhuman agency as a means of reinforcing their moral laws.

The one characteristic which is common to all living organisms, is the will-to-survive. In man this is expressed by three fundamental groups of unlearned motivations: those concerned with self-preservation (survival of the Individual), propagation (survival of the species), and gregariousness (survival of the group). On this basis every living creature capable of learning would be expected to have

emotional motivations arising from the fears of being unable to preserve its life, to propagate itself, and to belong to a group. Man, with his unique facility for conceptual thought, has labelled these powerful emotions—the fears of death, infertility, and loneliness; and to a greater or lesser extent every human being is exposed to them.

It is true that some men and women commit suicide, some voluntarily become celibates and yet other become hermits, apparently contradicting the above motivations, but these acts imply an abnormality which is psychopathological.

To palaeolithic man, living an almost unimaginably different life to ours, these fears must surely have had an even more ominous impact than they have today. In this primitive environment it is not difficult to imagine that these emotional experiences led him to invent the concept of a supernatural agency as a means of rationalizing his fears.

### THE FEAR OF DEATH

If modern primitive societies are any guide, it is likely that palaeolithic man was so afraid of death that, even after he had accepted it as a concept, he would have been unwilling to face up to its inevitability. For even today in some primitive communities death is not acknowledged as a natural consequence of old age; if the deaths of some aged savages are not associated with an overt form of violence, any number of occult causes may be invented to account for them. Even after death had been recognized as inevitable, it was and still is, only rarely accepted as final. Man, palaeolithic and modern, has been unable to tear himself away from the emotional belief that some part of his

Individuality endures after the decomposition of his body. The grave furniture found in palaeolithic burials is evidence that even in these times man believed that the dead continued in some form of existence in which tools, weapons, and ornaments would be of some value.

Prehistoric man must have believed that some disembodied characteristic of the individual survived his death—in other words he must have arrived at the concept of a spirit or soul. It is possible that sleep may have helped to lead to this concept. While his body lay curled on the ground beside the campfire, he seemed to hunt or to fight, to make love or to feast, in some other region. What was this part of him that wandered from the body in dreams? What, if not the soul which he naturally regarded as something distinct and separate? And when a man died, did not the soul go from him? When he was badly wounded, did it not disappear for a time, and then return again? Moreover, these souls or spirits (which quitted the body in sleep or trance) outlived death and appeared again to survivors. In dreams we often see the shapes of living men; but we also see with peculiar vividness the images of the departed. Everybody is familiar with the frequent reappearance in sleep of intimate friends or relations lately deceased. The savage accepts this dream-world as almost equally real with the world of sense presentation. As he envisages the matter to himself, his soul has been away on its travels without its body, and there has met and conversed with the souls of dead friends or relations.

Once man had persuaded himself that death was not absolutely final, he must have derived a good deal of reassurance and compensation from the idea. But it must

have added two new terrors of its own. Now man was confronted not only with the fear of ceasing to live, but he also had to fear the dead (or their spirits) and he had to worry about what might happen to him in the spirit world.

For once the spirit concept had evolved from the death concept, the idea of a special spirit world to accommodate these spirits must have been inevitable; and for want of a better alternative, the spirit world would surely have been modelled on the earthly world. In particular the hierarchy of men, from leader to slave, would have found its reflection in the spirit world. The idea of spirit leaders is therefore an obvious precursor to the idea of gods. For what are elemental gods but super-spirits-men/women? Once the spirit world had become established as the abode of man after he had left his earthly body, the idea would have been seized upon by human leaders as an invaluable weapon in enforcing moral codes but more of this later.

Thus the fear of death led by rationalization to the concept of an immortal spirit, not because there was any evidence for it, but because men desperately wanted it to be so. Moreover the spirit concept could be extended to include a belief in all-powerful spirits capable of influencing the conduct and environment of the living. Once he believed this, man no longer had to stand by helplessly as he was swept along by the tide of chance; now he could do something positive in his most frightened moments, he could pray. Pray that he should not die and pray that when he eventually did die he should find what he wanted in the life hereafter. This is very much Sir Edward Tylor's animistic argument, but this by itself is probably not sufficiently powerful to account for the universality of the concept of God.



## THE FEAR OF INFERTILITY

We cannot know for certain when the early men first came to realize the function of coition in the reproductive process. Malinowski has shown that even some contemporary savages have not correctly understood its purpose. However, upper palaeolithic cave paintings do, in general, seem to indicate an understanding of male fertility and it is usually assumed that by this time coitus was recognized as an integral part of procreation. Even so, anthropological evidence suggests that the part of the male may have been misinterpreted as a method of opening the female womb to permit the entry of a preformed embryo, either from some earthly or supernatural source.

This primitive confusion is not altogether surprising; although hominids (early men) are strongly motivated to copulate and are capable of conception at all seasons, the results of the act do not become apparent for some months! During the entire period of recorded human history the male has been dominant. In spite of the child-bearing prerogative of women, the assertive symbols of sex and fertility have been associated with the potency of the male. But the numerous palaeolithic figures representing pregnant women discovered by archaeologists strongly suggest that the position was reversed during that period of prehistory.

Although early man must have found the moment of birth one of the most awe-inspiring in his whole experience, he probably also found it extremely frustrating because it was a feat which he himself could not accomplish. If he believed that he had taken any part in the events leading up to it, then as we have said, he probably thought of himself more as an agent than a principal.

If this was so, the inference is that this unique procreative ability on the part of the female would have commanded both respect and fear in palaeolithic cultures. Moreover, in seeking to explain her extraordinary and unintelligible power, man is very likely to have fallen back on a supernatural rationalization. After all, man has always had to contend with his vanity—if he, man the hunter, the most superlative predator on the face of the earth, was unable to bear children, then it surely followed that the relatively ineffectual women must have been assisted by someone or something more powerful than himself: someone or something superhuman.

Bound up with these elemental fears there was almost certainly an undercurrent of apprehension, both conscious and unconscious, lest the fertility of the women should decline. Totally ignorant of human biology, palaeolithic men and women would have been powerless in this fear—the only possible remedy would be supplication to the supernatural agency that they may have held responsible for fertilising their women. Moreover if they thought of this supernatural power as an inhabitant of the spirit world, it would not have been unreasonable for them to direct their supplications towards a deceased female—particularly one who had herself achieved a large family. Perhaps the female figures which we have mentioned were intended as representations of spirit goddesses to which offerings could be made by the women when they wished to breed.

## THE FEAR OF LONELINESS

Every animal is motivated to behave gregariously in an attempt to overcome the inherent isolation which derives from its individuality. Man, because he is a self-conscious, concept-forming creature, is



peculiarly aware of this dilemma which he calls loneliness. In civilized societies the human child allays the terrifying loneliness of its first years by intimate contact with its mother, or mother substitute. Psychologists are agreed that in the early years of childhood mothers fulfil a function which is so indispensable, that deprivation during this period is likely to have a lasting effect upon the child's ability for social adjustment in later life. It seems that however disinterested, idiotic, or debauched the mother may be, she forms an essential link between the isolation of the child and the social complex of which it will ultimately form a part in fulfilling this function the mother is infallible as far as the young child is concerned. But a time comes in the life of every child when its mother, because she is human, ceases to adequately perform this duty. The children inevitably discover that their parents are to a greater or lesser extent untrustworthy, hypocritical, unjust, ill-informed, or plain stupid. With this disenchantment the psychological umbilical cord is severed and thereafter the child develops its mental resources more and more on its own. In particular it is thrown back on its own loneliness. At this stage the child actively seeks a replacement for its mother in order to support the burden of its solitude.

The more frequent reaction to parental fallibility has undoubtedly been the attempt to reconstruct the image of infallibility by resorting to an abstraction — the concept of an omnipotent and omniscient supernatural power. This concept has one great advantage over human contacts — it exists within the individual's own mind and therefore does not depend on man's ability to communicate with man. Communication between concept — forming men can be extensive, but it can never be complete — one individual is unable

to identify itself sufficiently with another for either to lose their separateness.

Although adolescents seeking a mother substitute are not necessarily aware of these motives, there is no doubt that they have, in chemical terms, a free valency in need of satisfaction. Whether God, a pop-singer, or a political dictor fills the gap will depend on a number of personal factors, as well as the prevailing trends in the community to which they belong. But this is a reflection on modern children living in a civilised society. To what extent is this relevant to palaeolithic man? Although it is usually assumed that palaeolithic men would have been capable of speech, we do not know just how adequate were their means of verbal communication. The probability is that it was very considerably less effective than it has been during the recorded history of mankind. If this was so, early man would have had an even greater sense of solitude — a greater feeling of isolation — than his modern descendants. Because he was less explicit, his need to depend on superhuman agencies for comfort would have been more pressing. Hence we can add the fear of loneliness to our list of motivations which were responsible for the origin of the concept of a superhuman power.

## RATIONAL MOTIVATIONS

The principal problems confronting palaeolithic men in their daily lives were presumably those arising from hunting, from internecine struggle with other tribes, and from the natural hazards of their environment. Success in the palaeolithic rat-race would therefore, have very largely depended upon the keenness with which movement could be perceived, and the alacrity with which it could be anticipated.

An anticipation presupposes a knowledge of causes, any sort of movement would have demanded an explanation. Of course man's interest in causality was not restricted to the movements of his opponents or his quarries. He has presumably always been curious to know the cause of the forces of nature which surround him. What causes the rain, the wind, the tides? What causes the motions of the sun and the moon? What causes birth and death? What distinguishes the animate from the inanimate? How was the world created?

There are an endless series of questions which even the most superficial seekers of causes cannot escape. Without the curiosity that demands answers to such questions as these, man would never have become the supreme predator, capable of anticipating and outwitting his adversaries. Without the concept of the cause-effect relationship the curiosity would have been of no avail. Once it is accepted that early man was capable of the causality concept, it is only a short step to postulating that he must have made a distinction between effects for which he could suggest a cause, and those which he found hopelessly baffling. The latter he attributed to the supernatural.

### POLITICAL INTRIGUE

Although palaeolithic politics may have been unsophisticated by our standards no community of individuals — whether human or not — can continue as a community without a leader. Leadership, in fact, is an immediate consequence of gregariousness, and where leadership is not simply a question of brute force, a measure of political intrigue is inevitable. It is unimaginable that concept — forming, scheming man would have submitted for long to being led by the physically strongest. Many qualities are

required of human leaders, not least of which is an insatiable ambition to lead and a ruthless determination to fulfil this ambition. It therefore follows that competition for leadership would have been almost entirely intellectual and so, presumably, the emergence of a new palaeolithic leader must have involved as much persuading, promising threatening, and blackmailing as we are accustomed to in more recent history.

Apart from helping to formulate laws of ownership, palaeolithic leaders would also have been responsible for their enforcement — and like their descendants they would have relied for enforcement on a combination of inducements and deterrents. We know today that no civilised society can successfully apply a moral code without an elaborate judicial system and an effective police force. But primitive contemporary cultures in which these expensive and complex services have not been thought out, rely upon other, less direct measures. These measures invariably depend upon two interrelated conditions; first, a belief by the majority in a super-human agency, and secondly, the ability of the leaders to induce and maintain an overwhelming fear by invoking the omnipotence of this agency. They are able to strike the 'fear of God' into those who fail to conform in matters outside the scope of the secular law or those whose crimes escape detection within it.

### MERITS OF SCEPTICISM

Thus we can see that Man has created God. The history of religion, like the history of man, has had its moments of greatness, but taken as a whole it is questionable if the public aspects of religion have made a positive contribution to human happiness, progress, or compassion. Indeed, many of the most bloody and intolerant episodes in

man's bloody and intolerant history have been inspired by the name of God. When men act upon a conviction that they possess absolute knowledge of the good, the right, and the true, they act with pharisaical cruelty they forsake the moral sensitivity of humanity, beguiled by a delusion that they have escaped the finiteness of the human situation.

The vitality and integrity of the intellectual life lie precisely in its ceaseless probing and questioning. It is choked to death by fixed and final answers. There is a difference in presuming the truth of an opinion because, although there are opportunities, it has not been refuted, and assuming its truth for the purpose of not permitting its refutation. If man wishes to seek simple answers, he can have it easily, surrounded as he is by a plethora of religious philosophies. But these explanations can only satisfy a frightened child, not an inquisitive and courageous adult. Faith is often the boast of the man, who is too lazy and self-complacent to investigate. The power and glory of science is its recognition of the tentative, hypothetical character of all its conclusions.

To those who believe in a personal God, in reincarnation, or in any form of immortal soul or spirit, death is not an end. On the other hand, to the atheist, death represents the final dissolution of our personality. And once this finality has been honestly and rationally accepted, death loses much of its horror. But not all: accepting death as final does not make the prospect of dying any more pleasant, nor does it make ceasing to live any more desirable. What it can do is to change the emphasis.

If the atheist or agnostic wants to perpetuate something of himself after the death of his body, he knows that he can only do so either through his children or by leaving behind him something worthy of being preserved. The change of emphasis allows the fear of death in the faithless to be channelled into socially beneficial family traits, or artistic and creative activities. There is, after all, no greater sense of achievement than the anticipation of leaving behind someone or something of value to mankind. △

### Guru-Sishya- No 5.

By. YASODH





## BOOK REVIEW :

**God and the Soviets***—By Constantin De Grunwald*

(Translated from the French by  
G. J. Robinson—Paskevsky (Hutchinson,  
London, 1961).

R. Lakshminarayanan, Bangalore.

Constantin de Grunwald grew up in Czarist Russia and made his university studies in St. Petersburg (now Leningrad). He emigrated to Paris in 1921. Although he is evidently an apologist for religion and subscribers to the theological sophistry of Pierre Teilhard de Chardin, his documentation of the Soviet government's efforts to propagate atheism and to roll back the influence of religion is objective enough, experienced journalist that he is/was. To make his documentation as complete as possible, the author spent a large part of the summer of 1960 in Soviet Union "at his own expenses".

My approach to the book was to take the documentation and ignore the author's deistic penchant. The documentation is heartening to atheists. For instance, one learns that a famous cathedral in Leningrad is now a

'Museum of the History of Religion and Atheism'. "The vast nave of the church is partitioned off into dozens of small areas filled with pictures, prints, pamphlets and an infinite variety of other exhibits all primarily intended to give a slanted idea of the history of religion". "Slanted" according to the deist/theist author. But let the innuendo pass. Further "we are introduced to 'the myths of God and Father, Christ, the Blessed Virgin and the veneration of saints as used by exploiters and the heroic struggle of the Russian people against the encroachments of the papacy' through old masterpieces of painting, sculpture, crucifixes and images of saints".

Indian rationalists might ask themselves the question: When are we going to convert our bigger temples into museums and the smaller temples into public lavatories?

The reader discovers further that there is in the U.S.S.R. a Society for the Diffusion of Political and Scientific Ideas which now carries on the work of the old Union of Militant Atheists. Atheist seminars have been started in most pedagogical (teacher training) institutes. We allow our teachers to be trained by Sai Bala. The Universities of Moscow and Kiev have faculties of the history and theory of atheism. "A thirty-four hour course covers the origins of religion, its close ties with the exploiting classes, the position of the church in Czarist Russia, various sects, religious feasts and the religious notion of the creation of the world".

"The Soviet Academy of Science backs up the anti-religious propaganda with its authority." (Can you get our C.S.I.R. and the U.G.C. to support your feeble effort, Mr. Suryanarayana?). "In June 1959 the Academy of Sciences organized a congress for the investigation of scientific atheism.



Soviet Russia's most illustrious names in the world of science (Mitin, Oparin, Pavlovski and others) participated in sessions and pointed out how advances in physics, chemistry, physiology and astronomy have made it possible to carry on a more effective battle against the modern fideism which underlines all religion." (Fideism — doctrine which places faith above reason). Indian scientists will hold seminars on Wisdom of the Vedas and lend their names to paid advertisements for courses on Transcendental Meditation.

#### THE SOVIET PRESS:

"The Russian Press has always given a prominent position to anti-religious propaganda. A foreign journalist had clipped as many as 120 articles on the subject during 1959 and 1960."

"Each time a church worker makes an act of renunciation of religion, the event is given enormous coverage in the official press." Towards the end of 1959, Pravda published a three-column Statement "bound to attract attention" signed by Professor Alexei Ossipov who renounced the Orthodox Church. Here are some extracts:

"I, professor of Sacred Scripture, of the old Testament and classical Hebrew in the Orthodox Seminary and Theological Academy at Leningrad, former inspector of its institutions, master of theology and archpriest — I have broken away from the Church and religion."

"I now make public confession of the atheism to which I have concluded as a result of much thought and study after a long and painful inner struggle and a complete revision of my idea of the world."

"After earnest and sincere study of the Bible and the history of the religions from a critical and historical point of view, after observing the dynamic progress of the natural sciences, after taking stock of the wretchedness of the entire capitalist world and the small, not to say miserable importance played there by religion and finally, after imbuing myself with Marxist-Leninist philosophy and our Soviet realism, which beckons us, not without authority, along the path they point out, the only right path."

"All of this led me to the deep-seated conviction that there is no God, no world of the spirit or "great beyond" and that every religious system is no more than illusory reflection within human consciousness of the still unfathomed mysteries of the nature of the social law, and of the psychological and physiological peculiarities of human beings themselves."

Can we hope that a Sankaracharya would make a similar statement one day? Can the puri I.R.A. convert even a minor mathadipathy to rationalism? Even if it did, can it persuade the jute press to publicise?

#### THE SOVIET LAW:

Article 52 of the new Soviet Constitution states: Citizens of the U. S. S. R. are guaranteed freedom of conscience, that is the right to profess or not to profess any religion, and to conduct religious worship or atheistic propaganda. Incitement of hostility or hatred on religious grounds is prohibited. In the U. S. S. R. the church is separated from the state, and the school from the church.

Article 18 of a law issued on 8th April 1924 stipulated that "the teaching of all religious doctrines, allowed in special theological courses only, is forbidden in all

educational establishments, whether they are state-operated or private'. Article 17 of the same law states: 'Religious associations (parishes) are forbidden to:

(a) establish welfare funds, co-operatives, production associations and generally, use funds at their disposal for any purpose other than meeting the exigencies connected with religion and worship;

(b) to lend material aid to their members, to organise prayer groups of children, young people or women and generally, to organise meetings, clubs, cells or centres for biblical, literary, trade, professional, religious, etc., studies as also to establish sanatoria or dispensaries'. Does that leave any elbow-room for Soviet Sai Babas? Further 'only books requisite for worship may be kept in churches and other places of worship'. Obviously to prevent canvassing and pamphleteering for religion.

Articles 122 to 126 of the Soviet Penal Code provide very stringent penalties for violations of the above regulations. Enforced labour in corrective institutions will be the penalty for; 'Religious instruction given to children or young people in educational institutions and public or state schools..... any fraudulent actively aimed at arousing superstitions among the people for the purpose of gaining thereby..... obligatory collections taken for the support of ecclesiastical or religious groups..... the usurpation of public functions..... the celebration of religious services in or on public institutions or premises..... exhibition of religious images in or on public institutions or premises'.

Do Indian atheists want anything more or less than such legislation? That is the question. Remember that the proof of the rationalist pudding is in eating it. Do we want a state that cares for our aspirations or not?

## THE PUBLIC MOOD:

The journalist-author has felt the pulse of the Russian people, being an emigre Russian himself. His conclusion: "Religion is not in vogue in the Soviet Union; on the contrary, it is almost 'bad form'..... Even the believers today are very different from believers before the Revolutions". In that country the editor of a journal with the title 'Science and Religion' (which would be suspect to me if it were an Indian or an American Journal) declares proudly: 'The entire social structure of the Soviet Union promotes a scientific conception of the world a conception which is entirely free from religious beliefs. This explains the incontrovertible fact that millions of Soviet citizens, who previously believed in God, have now thrown over religious convictions, and that the younger Soviet generations who have been raised according to scientific principles are, generally speaking, completely devoid of any religious errors.'

A Moscow University student tells the author: "There are no believers left in the University. But that does not mean that we are unaware of the religious problem. There are frequent heated discussions of the subject in student-seminars which are devoted to studying Marxist philosophy, but even after long and complicated exchanges of opinions, everyone always arrives at the same atheistic conclusion".

A Russian official tells the author in a casual conversation; "You are acquainted with the magnificent achievements of the Soviet Union. Not content with our technical progress alone, we have succeeded in developing a new society, a classless society conceived entirely on the basis of dialectical materialism. All the old prejudices and dogmatic doctrines have been thrown out, along with a heritage of medieval superstition. Historically, religion is a product of ignorance.

How was this climate of opinion brought about? The answer is: "The ruling party looks on religious belief as a survival of the past; it fights against this belief by means of systematic propaganda which it alone controls and directs". Does that amount to stamping out individual freedom, as our anti-communist friends allege? Here are the diest/theist author's conclusions: "The constitutional law which affirms and guarantees freedom of religious worship is now applied in all its vigour all over the Soviet Union. About 10,000 churches and places of worship of all the country's religious groups are open and millions of the faithful attend religious ceremonies more or less regularly". The population of the Soviet Union is 238 million (1968 figure). The author tries to estimate the number of believers and atheists. "According to the pessimist camp, there are about 20 million believers and according to the optimists, about fifty million". (Note: the words 'optimist' and 'pessimist' are used from the point of view of the diest author.) "The number of convinced atheists and free thinkers is at least equal to the number of believers, and certainly not less". About religious freedom, the author continues: "On the other hand, this freedom of worship is interpreted in the strictest sense. The law places no obstacles in the way of religious services or the training of ministers of religion but this liberty does not extend to education nor charitable works, nor does it afford any possibility of spreading or defending religious ideas by means of the Press, radio or public lectures, nor, finally, does it grant the right to own real estate".

In other words, take away the capitalist foundation, and the religious superstructure falls like a house of cards. And that takes us back to 'Achilles' Heel of the Rationalists' (FREETHOUGHT, August 1978).

## Test for Reason No. 21

### SHEPHERD'S PUZZLE

On a certain pasture the grass grows at an even rate. It is known that 40 cows can graze on it for 40 days before the grass is exhausted, but 30 cows can graze there as long as 60 days.

How many days would the pasture last if 20 cows were to graze on it?

- RULES:**
1. The entries should be received on or before 15-6-1979.
  2. There is a prize of books worth Rs. 10/- to be sent to the winner. If there is more than one correct entry the prize will be divided equally.
  3. Readers are requested to quote their Membership Number or Subscription No.

### TEST FOR REASON No. 20:

The solution and the names of the winners will be published in the next issue.

Constantin de Grunwald. I must add, is not exactly an anti-communist, except that he wants to see his God and religion salvaged from the materialist onslaught. He gives credit to the Soviet achievement in his own way: "As it happens, the Russian Communists themselves, though they do not know it or admit it, are in the process of building a society which could be called 'Christian', a society in which habitual mutual assistance must reign, with no pre-occupation about money, a society governed by the communal spirit and a humanitarian and pacifist ideal". In other words, the Christian author is saying: The proof of the Christian pudding is in eating it. Amen. Δ

## New Members

We heartily welcome the following New Members to I. R. A.  
ORDINARY MEMBERS :

Membership No.	Name	Place
M-492	Mr. G. Pandian, M.A., B.Sc., B.T.	Madras (Tamilnadu)
M-493	Mr. Vi. Pa. Pazhanivelanar, B.O.L.	Thiruthuraipundi (Tamilnadu)
M-494	Mr. K. A. Ameeth, B.A., B.Ed.	Kadapakkam (Tamilnadu)
M-495	Dr. M. Shaumugam.	Madras (Tamilnadu)

A. SURYANARAYANA,  
General Secretary, I. R. A.

## An Acknowledgement

Consequent on the increase in the rate of Life Membership Fee of the Association from Rs. 100/- to Rs. 200/- with effect from October 1978, some of the Life Members who enrolled before the date of increase were generous enough to help the Association by remitting the difference of Rs. 100/-. Since the increase was not given any sort of retrospective effect their dedication to the cause of rationalism is laudable.

Their remittances are gratefully acknowledged hereunder:

Membership No.	Name	Place
LM-5	Mr. S. L. Bharati, M.A.B.L.	Madras (Tamilnadu)
LM-7	Mr. K. S. C. Babu, M.Com., A.C.A.	Mysore (Karnataka)
LM-8	Mr. K. V. Ratnam, B.A.	Rajamundry (A.P.)
LM-16	Mr. Shyam Prasad, B.A.	Sangam Jaganlamudi (A.P.)
LM-19	Prof. Regis S. Victorlen	Pondicherry
LM-42	Dr. V. Prabhakara Rao, M.B.B.S.	Rajahmundry (A.P.)
LM-46	Mr. Dinesh Nettar, M.Sc.	Madras (Tamilnadu)
LM-50	Ms. Shakuntala Paranjpye	Poona (Maharashtra)

It is hoped that other Life Members would also voluntarily come forward to help their Association financially.

Ms S. V. VASUNDHRA,  
Treasurer, I.R.A.